By-Lance, Wayne D.

Developing Teacher Produced Instructional Materials -- Part I.

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Teacher involvement in the development of instructional materials for Trainable Mentally Retarded (TMR) children and the criteria to be considered in developing these materials are discussed. Among the topics presented are (1) the TMR teacher's awareness of pupil needs, (2) the applicability of materials to teaching style and learning style, (3) the teacher's enthusiasm in trying out the materials, (4) the need for more special materials for the TMR child, (5) the evaluation and modification of materials developed, and (6) the opportunities for pupil involvement. It was concluded that objectives should be stated in operational terms. Materials should be developmental and sequential, should include the theories and principles of learning, should fit the teacher's teaching style and the child's learning style, and should relate to the social level at which the TMR child is functioning. The materials should have intrinsic appeal. A list of references on training the TMR child is provided. (Author/NS)

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ABSTRACT

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION

"Developing Teacher Produced Instructional Materials -* Part I"

Wayne D. Lance, Associate Professor of Education, University of Oregon

A panel presentation to the 46th Annual International CEC Convention,

New York, April 18, 1968.

New York, April 18, 1 A rationale for the development and production of materials by the teacher of TMR children was presented. Among the arguments presented THIS DOCUMENT HAS BEEN REPRODUCED EXACT PERSON OR ORGANIZATION ORIGINATING IT. POINTAINED DO NOT NECESSARILY REPRESENT OFFICI POSITION OR POLICY. to support this point-of-view were the following:

- The teacher's awareness of pupil needs
- The applicability of materials to teaching style and methodology
- The benefits of the aura of experimentalism
- The immediate need for materials
- The relative small size of the commercial market
- The facilitation of evaluation and modification
- The involvement of pupils in development and production Eight criteria for developing materials were discussed.
 - The need for a theoretical base

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- The benefit of stating objectives in an operational manner 2.
- The value of a developmental and sequential structure
- The relevance of principles of learning
- The relationship of learning and teaching styles 5.
- The implications of the social level of pupils
- The need for a built-in basis for evaluation and modification
- The concern for intrinsic appeal of the material 3.

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^{*} Part II of this topic is being presented by Louise S. Appell, University of Kentucky.

DEVELOPING TEACHER PRODUCED

INSTRUCTIONAL MATERIALS - *PART I

Whyne D. Lance
Associate Professor of Education
University of Oregon

A panel presentation to the 46th Annual International C.E.C. Convention, New York, April 18, 1968.

Panel: "Teaching Techniques and Materials for T.M.R. from 5-20"

Although several recent articles have pointed out the problems associated with reliance upon teachers for the development and production of materials (Lance, 1967; McCarthy, 1966; Zbinden, 1967), a number of compelling reasons exist to justify the continued involvement of teachers in this important task. This paper will present a rationale for the development of materials by teachers of the TMR, and will discuss the criteria to be considered in materials development.

Rationale

Standing foremost among the arguments supportive of the teachers' involvement in materials development is the fact that the classroom teacher is the one person most aware of the needs of pupils within the particular classroom. He is the "expert" on the learning style of each pupil; he can describe the level of development and achievement

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operationally the objectives for his pupils. If individualized instruction in the special class has real meaning, it has meaning to the teacher - and instruction will never be adequately individualized in a class for TMR pupils unless the teacher assumes some responsibility for the development of materials necessary to implement the program.

Not only do the pupils have some rather unique needs, but so do the teachers. We haven't paid too much attention to teaching style as a variable in the teacher-learner-environment triad and perhaps we should look more closely at this aspect of education.

To use a term in vogue at the moment, what "turns on" the teacher? It is evident from observations in classes for the TMR that whatever turns on the teacher will probably turn on most of the pupils. Enthusiasm is catching and the Hawthorne Effect in experimental studies is well known. We ought to test the hunch that materials need to be compatable with the <u>teacher</u>, as well as with the learner.

Materials are still in short supply and until an abundance of special materials for the TMR are at hand for every teacher, teachers will be forced to invent, manufacture, and in other ways produce their own. Satellite Special Education Instructional Materials Centers (S.E.I.M.C.'s) will help to alleviate this problem, but even so the immediate need precludes waiting several days or weeks for delivery.



Commercial publishers will not completely solve the problem of materials for the TMR, because of the relative small size of the commercial market. However, resources of the S.E.I.M.C.'s should begin to have a positive effect, and as teachers develop materials meeting acceptable standards, these same materials will be available through the national S.E.I.M.C. Network.

Another feature of teacher developed materials is that relating to evaluation and modification. The teacher is in a position to do his own field testing, and upon the basis of his findings to make the necessary changes in the material. Certainly he is aware of the teaching objectives and these become the criteria for measuring the validity of the material. Hopefully, the immediate feedback will permit almost immediate evaluation and modification.

Finally, when the classroom teacher develops material himself, he often finds the means whereby the pupils may participate in the production of the material. This experience has its obvious advantages for providing a meaningful learning situation as well as the less obvious effect of increasing pupil interest in the eventual utilization of the material.

Criteria for Developing Material

In a recent article on materials for the TMR, Martinson (1967) presented a model for the selection and application of instructional materials. He suggested the benefits derived from utilizing a theoretical base in this process. Without a theory firmly in mind,



the teacher who sets out to develop material is apt to end up with a hodgepodge of gimmicks and a poorly designed product. If the materials are to train the child in sensory-motor skills then the teacher should have some theory of sensory-motor development upon which to build. The consistency of approach that results is probably more important than the absolute validity of the theory itself - for it is doubtful that any theory will stand up under all empirical tests.

The second criterion for the development of materials by teachers has to do with educational objectives. If the application of principles of behavior modification, the techniques of precision teaching, and the prescriptive teaching process have taught us anything, it is that the teacher must be able to state objectives in an operational manner. Perhaps it would help if those of us at the S.E.I.M.C.'s would glue labels on all materials with operational objectives plainly in view! Obviously, this would not be possible, but the point is, these objectives must be always in mind if the learning experience is to be a profitable one. If the teacher is developing an instructional material to teach a TMR some aspect of self help, the objective should be explicit: e.g., in the task of hand washing "to turn on the hot and cold water to obtain the desired temperature of water." This is only one step in hand washing, and even this step may need to be broken down into smaller increments for some severely retarded children.



Thirdly, as one develops materials he needs to pattern materials along a continuum of sequential steps - if possible, following a developmental sequence. Zbinden (1967) has indicated the need for sequential educational materials for use in the TMR classroom and few teachers would dispute the fact that such materials are in short supply. Even with the S.E.I.M.C.'s acting as clearinghouses, we are finding that materials from different sources do not necessarily fit together in a neat sequential pattern. It is not enough just to accumulate materials - the developmental model needs to come before production.

A fourth criterion suggests that learning theory has something to offer the teacher turned inventor and author. We think we know something about the value of overlearning in teaching the retarded, the importance of meaningfulness of the material, and the implications of immediate feedback. We can take some cues from studies in discrimination and can design materials to eliminate extraneous stimuli. We may have to make some rather gross generalizations based on the evidence, but at least we ought to <u>look</u> at the evidence.

The "learning style" of the pupil and the "teaching style" of the teacher comprise a fifth category. Happ (1967) describes some didactic apparatus for the mentally retarded and, as an example, of the wavs in which materials should be individualized, he discusses the "startle" element built into some materials for the passive child. This same



element might be inappropriate for certain over-active children. The same type of agrument can be made in suggesting that the material should fit the teacher's style as well.

The sixth criterion to be considered by the teacher is the social level at which the TMR pupil is functioning. Materials to teach social perceptual cues to six year old TMR children may be rather out-of-place for eighteen year old youth; although the task to be learned may be similar in the two examples, and the instructional media may be identical.

We have read and heard a lot about the evaluation of materials in the past two years since the S.E.I.M.C.'s have begun to function and we will undoubtedly hear a great deal more. There are several ways to approach evaluation (Williams, 1966), but perhaps the best is to build the means for evaluation into the material - or at least we ought to have evaluation as a goal when we <u>start</u> to develop the material. According to one source at least (Sheperd and Rolland, 1967) teachers appear to be reluctant to evaluate materials. However, this may be less true of the teachers who have actually developed their own. If the concept of the teacher as a researcher takes hold, I doubt that much of this reluctance will continue.

Finally, a teacher developing materials ought to look at the intrinsic appeal of the material. The resources available to the teacher through the S.E.I.M.C., the regular IMC, and audio-visual



departments should prove to be a great help in this respect. Special education teachers have been scavengers for so long that we are in the habit of using second best and cast-offs, and the results have sometimes been rather shabby. Not that we shouldn't continue to use unsophisticated common objects when they will do the job. As you are aware, there are now materials on the market in fancy packages with even fancier price tages that are not much better than some of the items you have in your cumboard at home, or can pick up at the discount house for one-third the price. My point, however, is that we should explore all the resources and then select that which does the job in the most efficient manner.

Instructional materials are not a panacea for the TMR teacher, but they sure do make a difference!



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